without irradiating at least a second area of said surface, to remove said protective group from said nucleotides in said first area;

contacting said first area and said second area of said surface with a first nucleotide to couple said first nucleotide to said immobilized nucleotides in said first area, and not in said second area, said first nucleotide capped with said photoremovable protecting group to provide a partially completed nucleotide array;

generating another pattern of light and dark areas by selectively irradiating with light at least a part of said first area of said surface and at least a part of said second area to remove said protective group in said at least a part of said first area and said at least a part of said second area;

contacting said first area and said second area of said surface with a second nucleotide to couple said second nucleotide to said immobilized nucleotides in at least a part of said first area and at least a part of said second area to provide to further complete said partially completed nucleotide array;

performing additional irradiating and nucleotide contacting and coupling steps so that a matrix array having at least 100 nucleic acids having different sequences is formed on said support; and

said method of reducing degradation comprising maintaining throughout the manufacturing process said partially completed nucleotide arrays in an ozone depleted atmosphere.

19. (New) A method according to claim 18 wherein said ozone depleted atmosphere comprises carbon-filtered air.

20. (New) A method according to claim 19 wherein said ozone depleted atmosphere has an ozone concentration of less than 10 ppb.

21. (New) A method according to claim 20 wherein said ozone depleted atomosphere has an ozone concentration of less than 5 ppb.

22. (New) A method according to claim 21 wherein said ozone depleted atmosphere has an ozone concentration of 0 to 2 ppb.

23. (New) A method for fabricating an oligonucleotide array said method comprising maintaining said array in an ozone depleted atmosphere.

24. (New) A method according to claim 23 wherein said ozone depleted atmosphere comprises carbon-filtered air.

25. (New) A method according to claim 24 wherein said ozone depleted atmosphere has an ozone concentration of less than 10 ppb.

26. (New) A method according to claim 25 wherein said ozone depleted atmosphere has an ozone concentration of less than 5 ppb.

27. (New) A method according to claim 26 wherein said ozone depleted atmosphere has an ozone concentration of 0 to 2 ppb.

REMARKS

Applicants submit the following new claims to more accurately and completely capture the present invention. Ample support for new claims 18-27 may be found in both the specification and the originally filed claims. The Examiner's attention is also particularly called to examples 1-3 in the originally filed application.

Applicants believe that the present claims are in condition for an early allowance. In this regard, it is noted that the Examiner's previous rejections of the claims concerned, inter alia, the level of ozone that exists in inert gases (for example He). This ground of rejection is entirely obviated by the new claims which are directed to methods of preventing degradation of nucleic acid arrays by depleting air of ozone. In this regard,

applicants wish to point out that the present claims focus on maintaining a partially completed nucleic acid array in air depleted of ozone by, for example, using carbon scrubbing. The prior art which largely concerns the use of Nobel gases (e.g., He) or other inert gasses (e.g., nitrogen) does not teach or suggest applicant's presently claimed invention.

If the Examiner believes that a telephone conference would expedite the instant application, the undersigned may be contacted at 408-731-5875.

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Respectfully submitted,

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